

US EPA ARCHIVE DOCUMENT

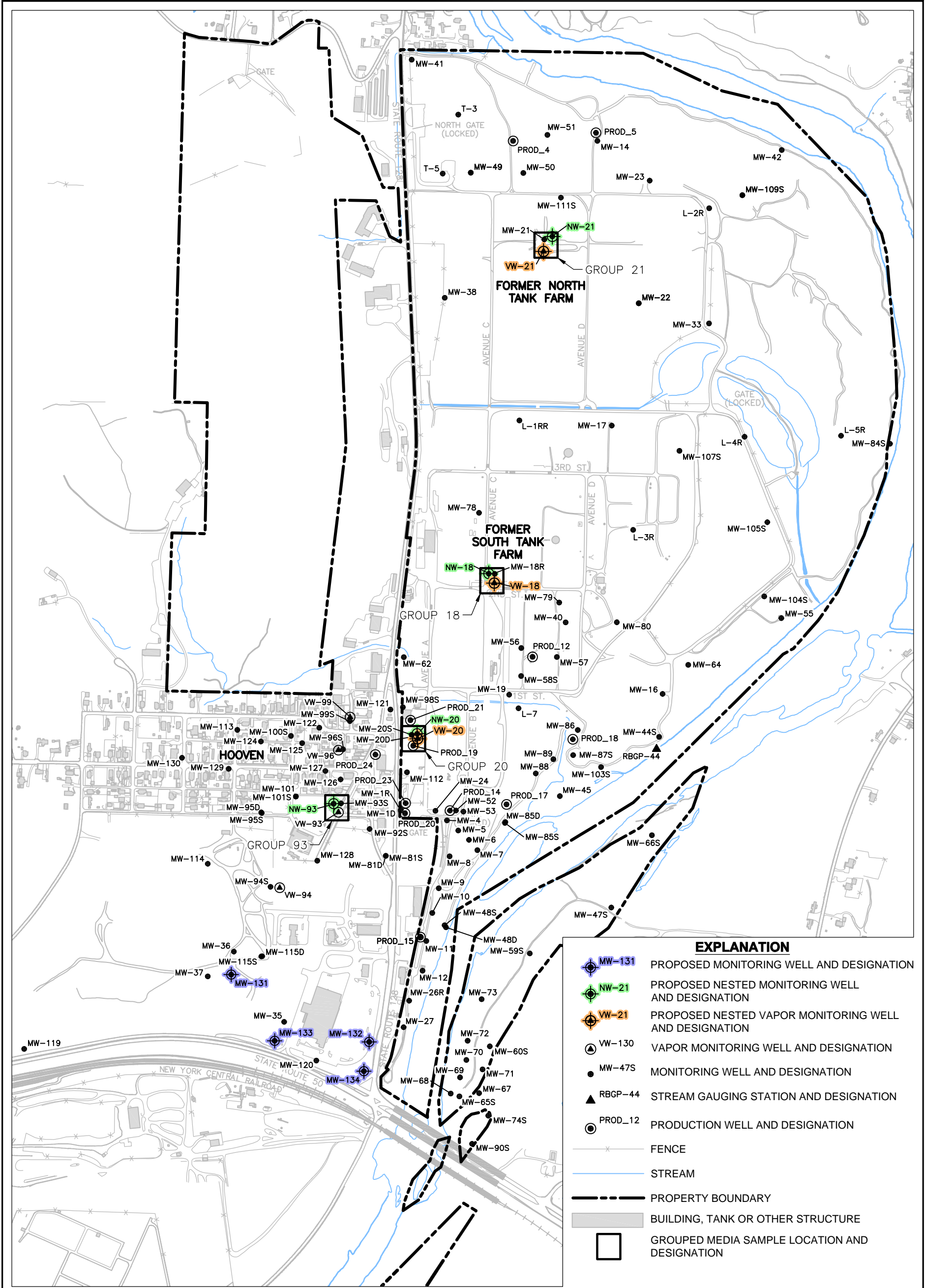


FIGURE 2-1

SITE LAYOUT MAP

CHEVRON CINCINNATI FACILITY
HOOVEN, OHIO

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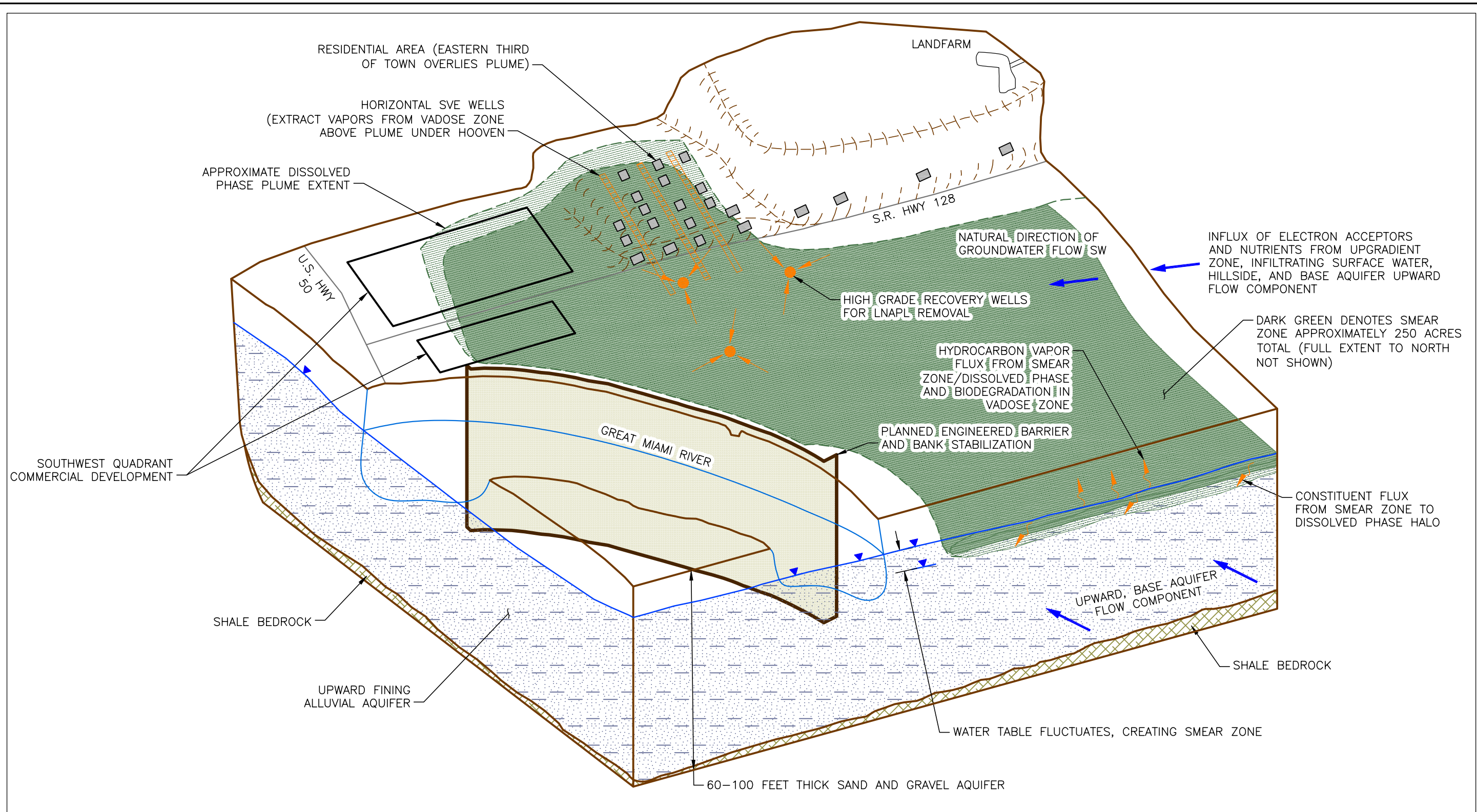
Drawn By: REP

Checked By: DR

Scale: 1" = 650'

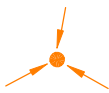



Date: 11/12/07

File: 500FACILITYMAP_RIP-OMM



Source: Provided by Chevron Cincinnati.

EXPLANATION

-  HIGH-GRADE PUMPING TARGETED AREAS WITH HIGHEST RESIDUAL LNAPL SATURATION.
-  WATER LEVEL
-  DISSOLVED PHASE PLUME EXTENT
-  SMEAR ZONE EXTENT



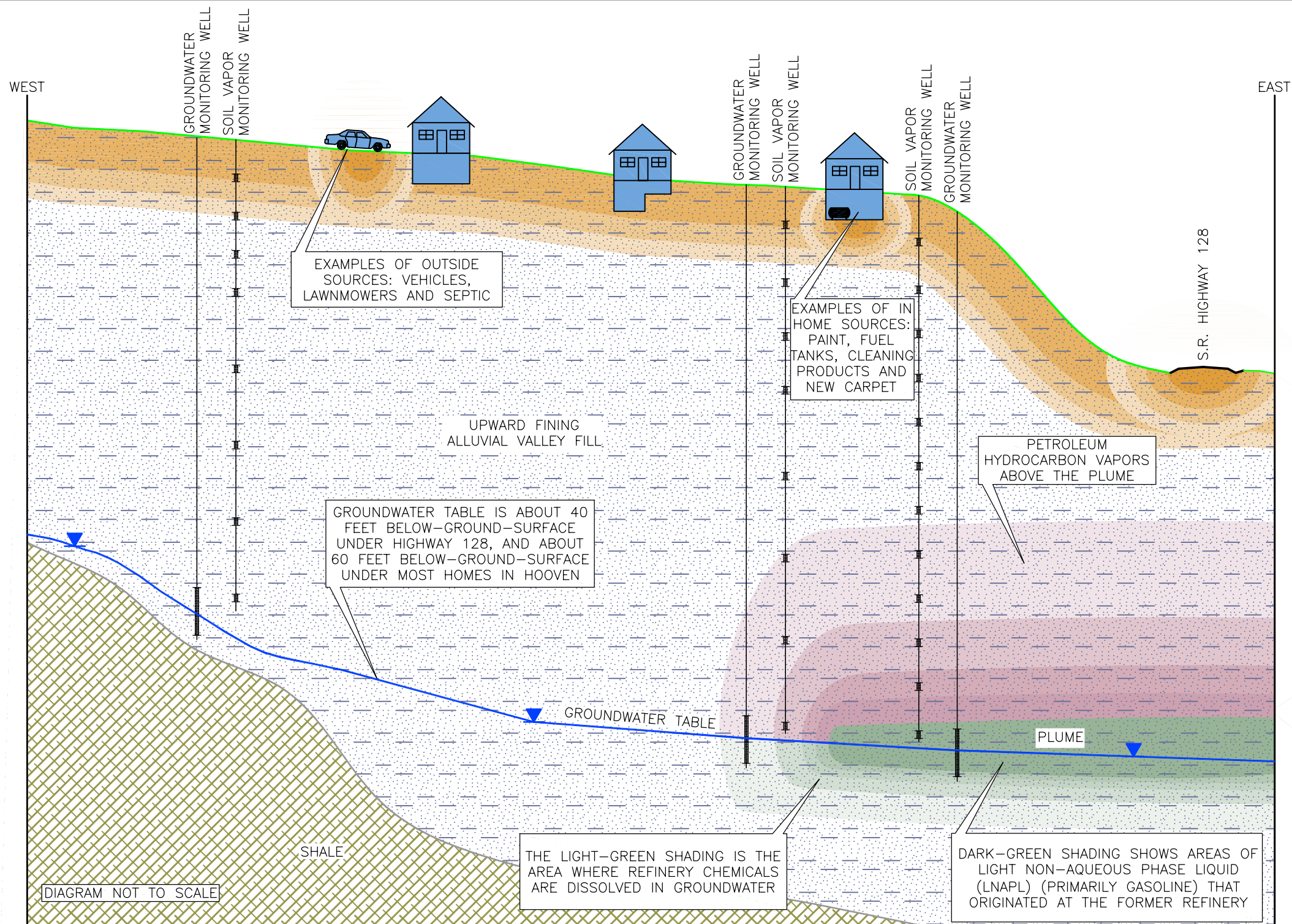
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FIGURE 2-2

GROUNDWATER CONCEPTUAL SITE MODEL

**CHEVRON CINCINNATI FACILITY
HOOVE, OHIO**

Drawn By: REP	Checked By: KR	Scale: NONE	Date: 8/22/07	File: 500GWCONCSITEMODEL
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**NOTES:**

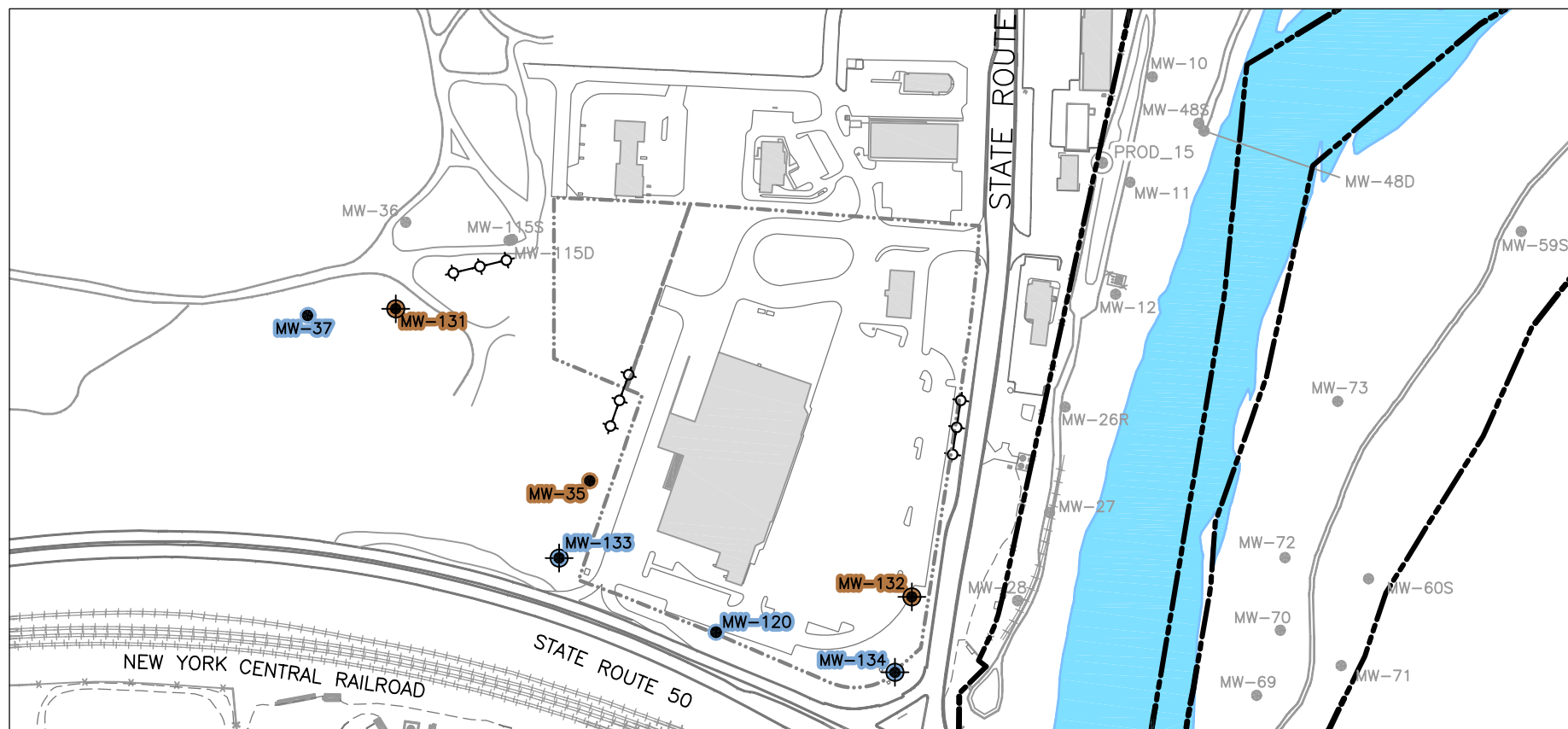
1. THIS DIAGRAM SHOWS THE GENERAL CONDITIONS UNDER HOOVEN IN CROSS SECTION, INCLUDING THE GENERALIZED GEOLOGY, DEPTH TO THE WATER TABLE AND DISTRIBUTION OF HYDROCARBONS ATTRIBUTABLE TO THE FORMER REFINERY.
2. BOTH THE DISSOLVED CHEMICAL AND THE VAPOR CONCENTRATIONS DECREASE TO BELOW DETECTABLE LEVELS BEFORE THEY MOVE VERY FAR FROM THE LNAPL. FOR THE VAPORS, CONCENTRATIONS DECREASE TO BELOW HEALTH-BASED SCREENING LEVELS A SUBSTANTIAL DISTANCE BELOW THE GROUND SURFACE.
3. THE ORANGE SHADING AT VARIOUS AREAS NEAR THE GROUND SURFACE REPRESENTS THE ZONE OF LOW CONCENTRATION VAPORS THAT RESULT FROM COMMON HUMAN ACTIVITIES AT THE SURFACE. THESE ACTIVITIES INCLUDE THE USE OF GASOLINE IN VEHICLES AND SMALL ENGINES AS WELL AS FUEL OIL TO HEAT HOMES.

**FIGURE 2-3**

**HOOVEN SUBSURFACE CONCEPTUAL SITE MODEL
WEST - EAST CROSS-SECTION**

**CHEVRON CINCINNATI FACILITY
HOOVEN, OHIO**

Drawn By: REP Checked By: DR Scale: NONE Date: 8/22/07 File: 500HOOVENCONCSITEX-SEC



EXPLANATION

- PROPOSED PERMANENT ROST TRANSECT
- MW-133** PROPOSED POINT OF COMPLIANCE MONITORING WELL AND DESIGNATION
- MW-131** PROPOSED SENTINEL MONITORING WELL AND DESIGNATION
- MW-37** POINT OF COMPLIANCE MONITORING WELL AND DESIGNATION
- MW-35** SENTINEL MONITORING WELL AND DESIGNATION
- MW-119 MONITORING WELL AND DESIGNATION
- PROD_15 PRODUCTION WELL AND DESIGNATION

- BUILDING, TANK OR OTHER STRUCTURE
- FENCE

- CHEVRON PROPERTY BOUNDARY
- GOLSCH PROPERTY (LEASED)

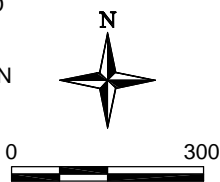
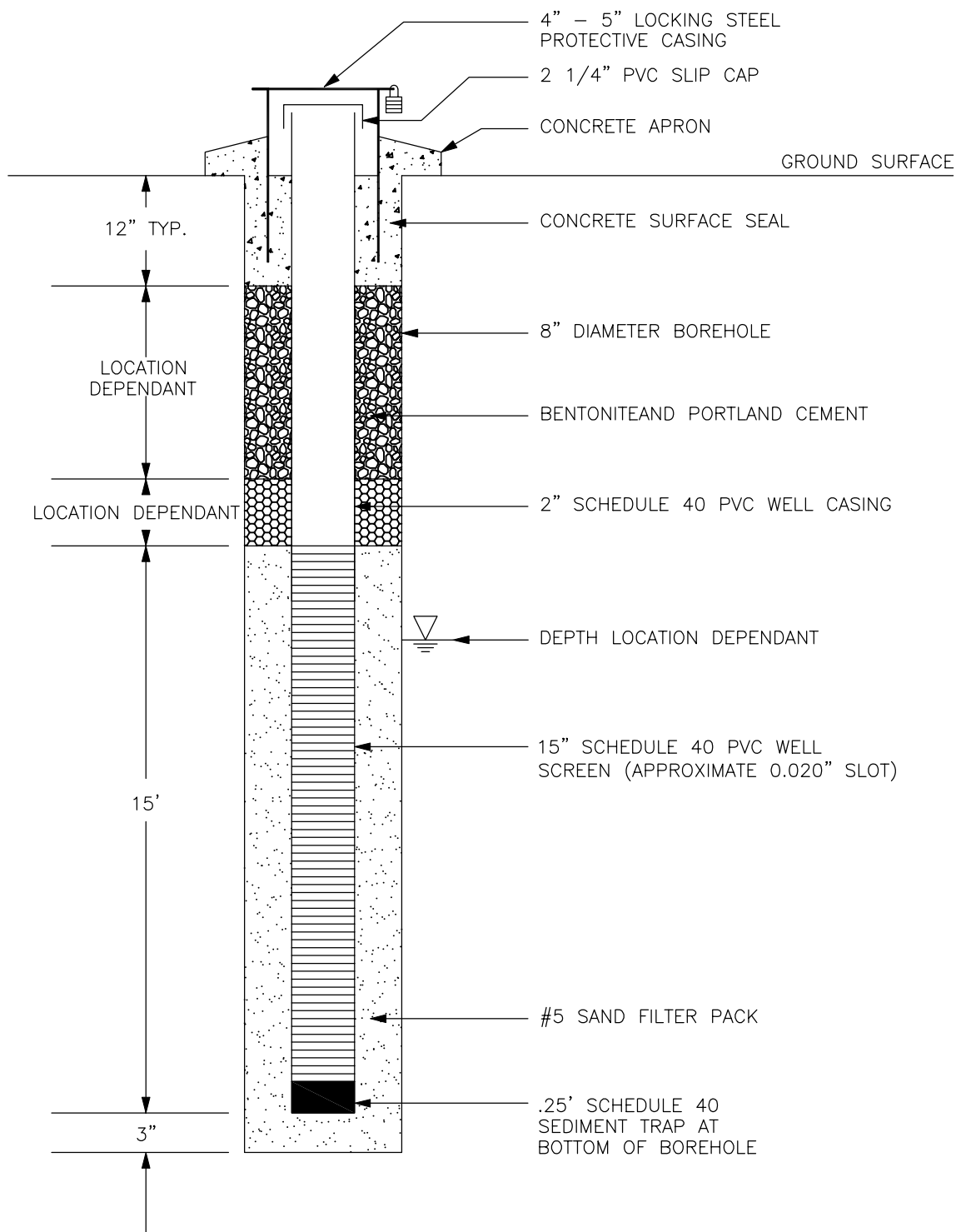


FIGURE 4-1

SENTINEL, POC AND ROST
TRANSECT MONITORING WELLS

CHEVRON CINCINNATI FACILITY
HOOVEN, OHIO

Drawn By: VLP Checked By: DR Scale: 1"=300' Date: 1/26/07 File: 500SWQROST



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FIGURE 4-2

**MONITORING WELL
COMPLETION DETAIL**

**CHEVRON CINCINNATI FACILITY
HOOVEN, OHIO**

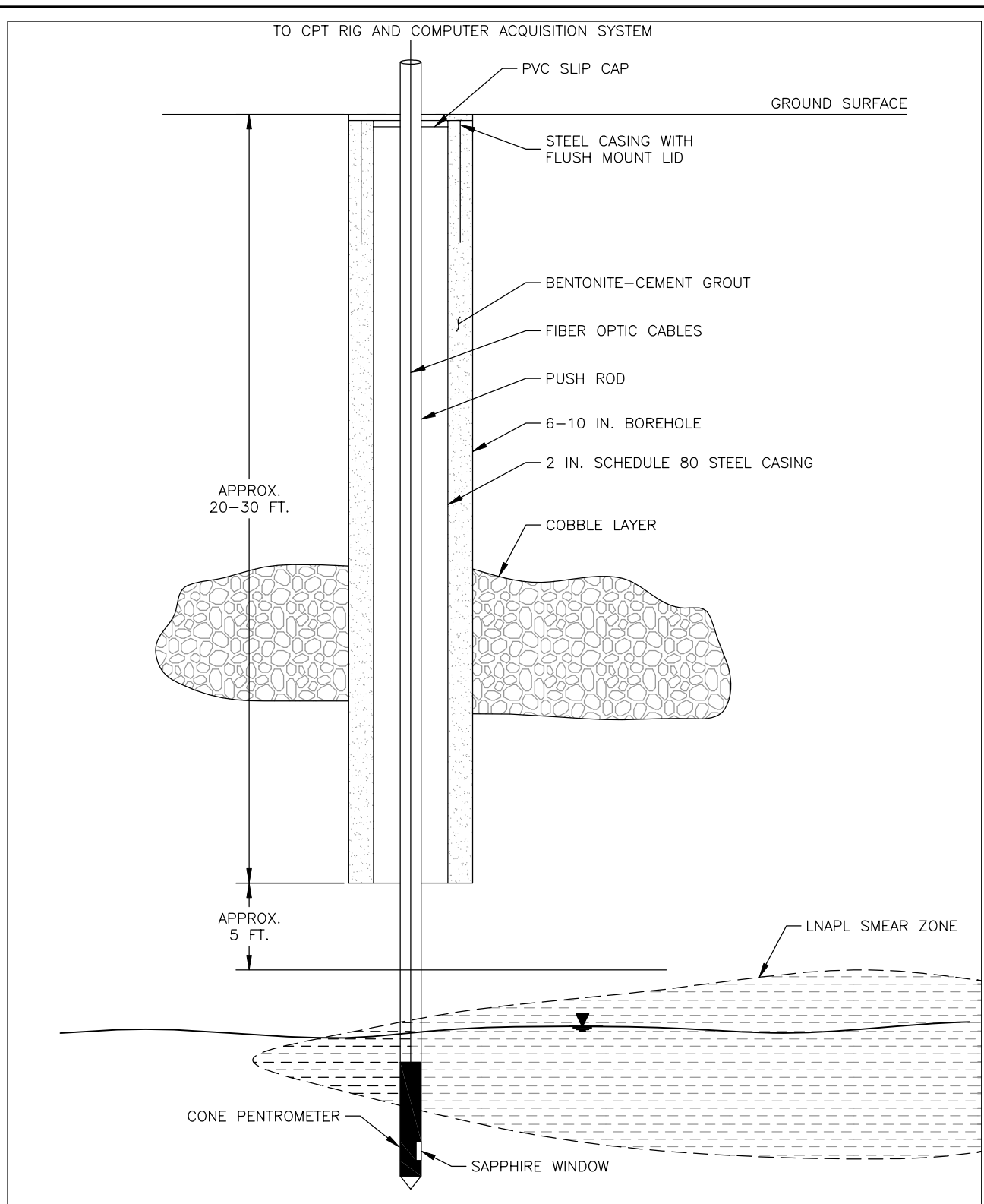
Drawn By: TWB

Checked By: DR

Scale: NONE

Date: 8/24/07

File: 500MONITORWELLDDETAIL



NOTE:

1. ANNUAL ROST TESTING CAN BE DONE USING THE SAME CASING HOLE EACH YEAR.
2. PUSH ROD AND CASING DIAMETERS TO BE DETERMINED BY ROST CONTRACTOR BASED ON AVAILABLE TECHNOLOGY.

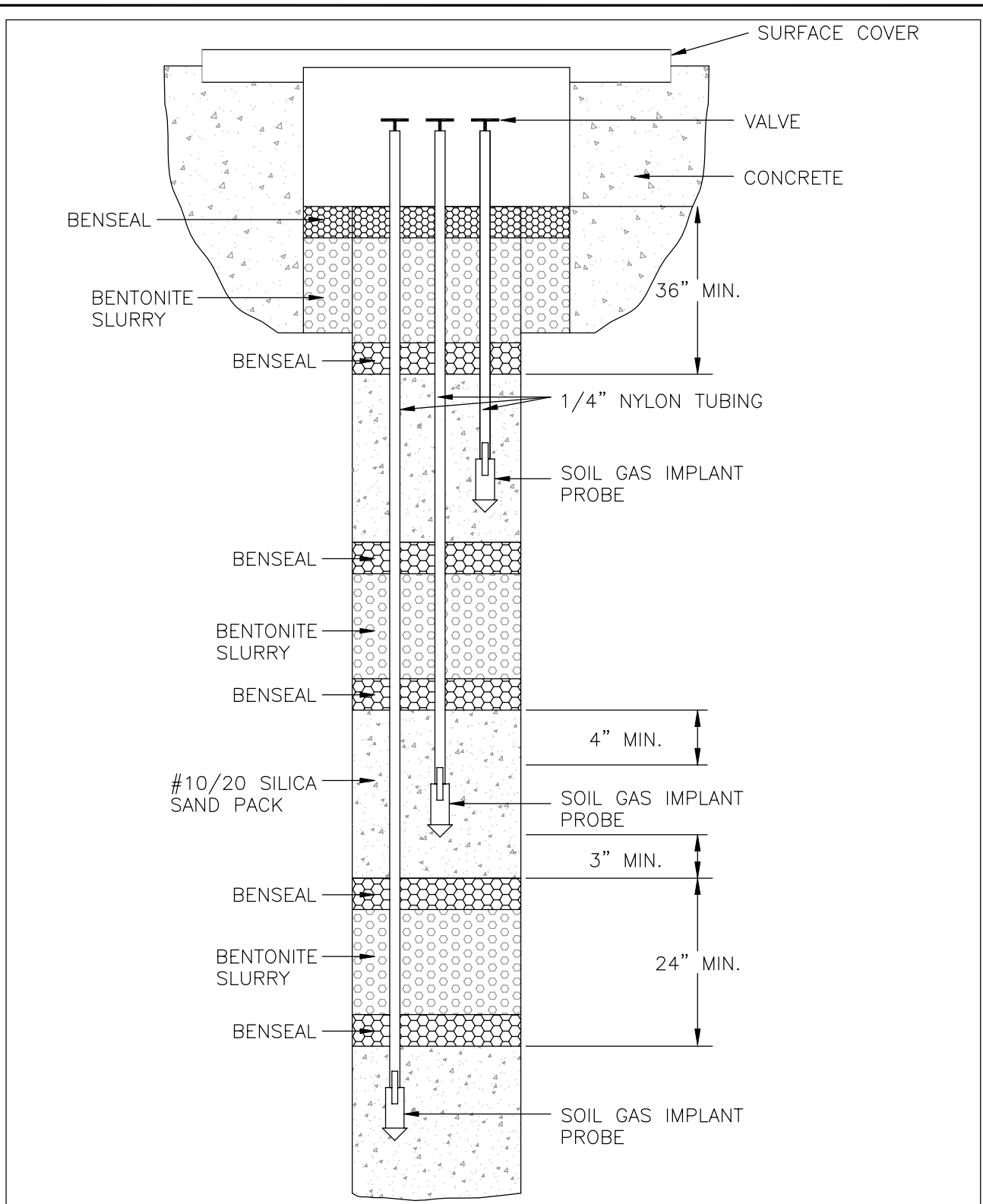


FIGURE 4-3

ROST WELL COMPLETION DETAIL

**CHEVRON CINCINNATI FACILITY
HOOVEN, OHIO**

Drawn By: REP	Checked By: DR	Scale: NONE	Date: 12/3/07	File: 500ROSTWELL
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NOTE:

ACTUAL NUMBER OF SAMPLING POINTS WITHIN THE NEST MAY VARY UP TO SEVEN DEPENDING ON DEPTH TO GROUNDWATER, VERTICAL SPACING AND LITHOLOGY. APPROXIMATE SPACING BETWEEN SAMPLING POINTS IS 5 TO 10 FEET.

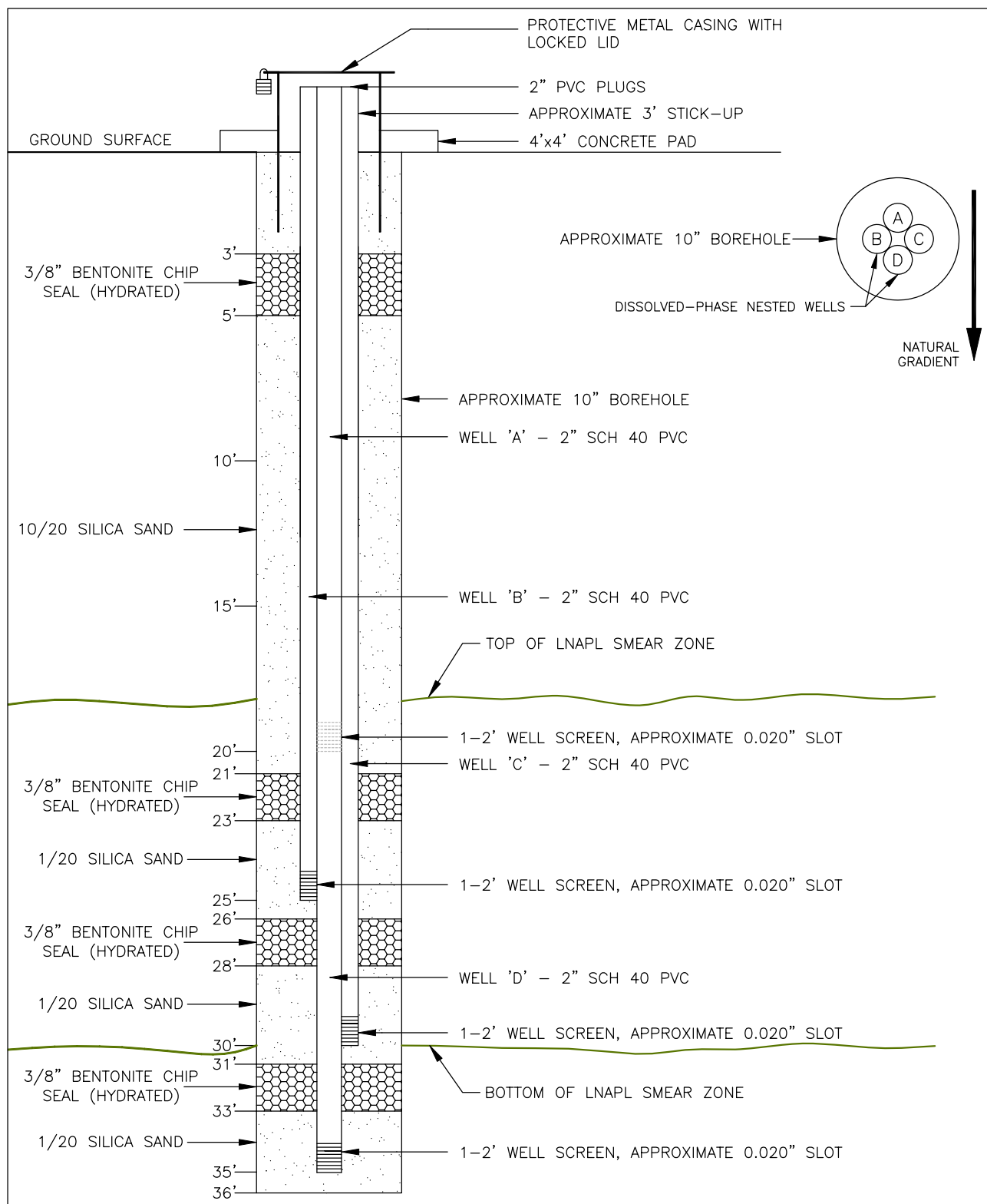


FIGURE 8-1

NESTED VAPOR MONITORING WELL DETAIL

**CHEVRON CINCINNATI FACILITY
HOOVEN, OHIO**

Drawn By: REP Checked By: DR Scale: NONE Date: 8/21/07 File: 500NESTVAPORWELL



NOTES:

1. SAMPLING INTERVALS MAY CHANGE AS NEEDED TO TARGET SPECIFIC LOCATIONS WITHIN THE SMEAR ZONE.

2. INSTALL NESTED WELL SO THAT SHALLOWEST WELL 'A' IS UP-GRADIENT OF NATURAL GROUNDWATER FLOW

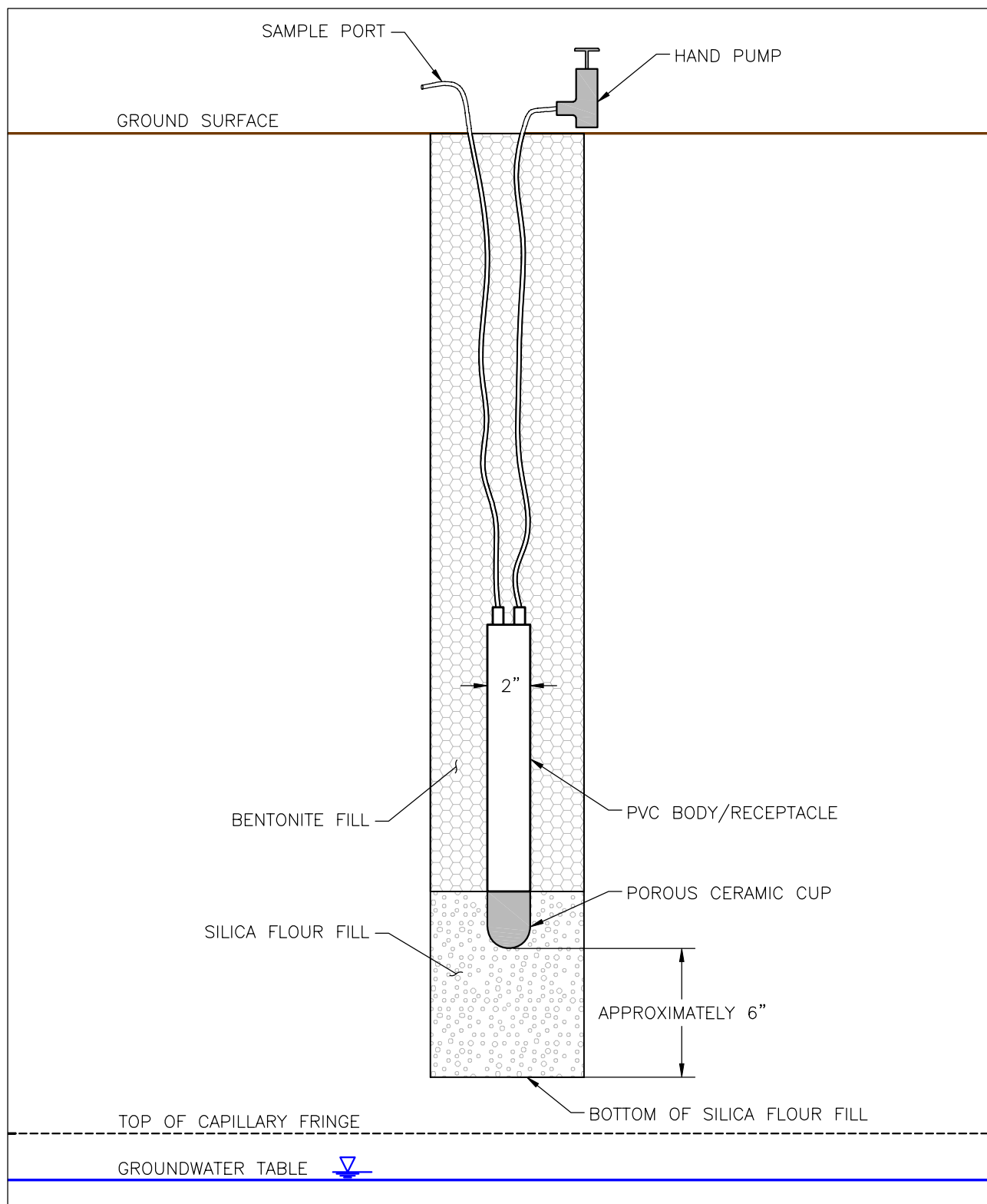


FIGURE 8-2

NESTED GROUNDWATER MONITORING WELL DETAIL

**CHEVRON CINCINNATI FACILITY
HOOVEN, OHIO**

Drawn By: TWB | Checked By: DR | Scale: NONE | Date: 4/10/07 | File: 500DISSPHASEWELLDDETAIL



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FIGURE 8-3

LYSIMETER DETAIL

**CHEVRON CINCINNATI FACILITY
HOOVEN, OHIO**

Drawn By: REP	Checked By: DR	Scale: NONE	Date: 8/22/07	File: 500LYSIMETERWELL
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